

REMARKS

Summary of the Office Action

Prior to entry of the present amendment, claims 1-3 and 22-34 are pending in the application. Claims 4-21 were previously cancelled. Claims 1-3 and 22-34 are rejected under 35 U.S.C. § 112, first paragraph and under 35 U.S.C. § 112, second paragraph. Applicants address each basis for rejection below.

Amendments to the Claims

Claims 1, 22-24, 27, 28, 31, and 32 have been amended, claims 3, 26, 30, and 34 have been cancelled, and new claims 35-38 have been added. Claims 1, 23, 27, and 31 have been amended to specify a nucleic acid sequence “containing a loss of function mutation, wherein said nucleic acid sequence containing said loss of function mutation has at least 95% sequence identity to...” SEQ ID NO: 24, 26, 28, or 2, respectively. Claims 1, 23, 27, and 31 have also been amended to specify that the cell is a “*C. elegans* vulval precursor cell.” Claims 22, 24, 28, and 32 have been amended to specify that the Class A synthetic multivulval gene is *lin-15A*. New claims 35-38 are directed to the method of claim 1, 23, 27, or 31, respectively, where the Class A synthetic multivulval gene is *lin-38*.

Support for the present amendments is found in previously pending claims 1, 22-24, 27, 28, 31, and 32, and at page 52, line 10 to page 53, line 6 of the specification. No new matter has been added by the present amendment. Applicants reserve the right to pursue any cancelled subject matter in this or in a continuing application.

Rejection under 35 U.S.C. § 112, first paragraph

Claims 1-3 and 22-34 are rejected under 35 U.S.C. § 112, first paragraph for lack of enablement. The Office states that while the claimed methods are enabled for use with

a “*C. elegans* vulval precursor cell” (Office Action, page 4), the claimed methods are not enabled for “*any cell type*,” “any cell in a nematode,” or “*any isolated mammalian cell*” (Office Action, page 4; emphasis original) as Applicants do not “provide direction or evidence of working examples to establish whether the invention is enabled for *all cell types*, all cells in a nematode, or all types of isolated mammalian cells” (Office Action, page 10; emphasis original).

Applicants respectfully disagree with this basis for rejection, nonetheless, solely to expedite allowance, the claims have been amended to specify the use of “*C. elegans* vulval precursor cells.” As the Office has indicated that the claimed methods are enabled for use with *C. elegans* vulval precursor cells, the 35 U.S.C. § 112, first paragraph rejection should be withdrawn.

Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-3 and 22-34 are rejected under 35 U.S.C. § 112, second paragraph as being indefinite. As the basis for the rejection, the Office states that claims 1, 23, 27, 31 are indefinite “because it is unclear whether the requirement for ‘a nucleic acid sequence having at least 95% sequence identity to the respective sequences of SEQ ID NOS: 24, 26, 28, and 2, is for a sequence which *includes* the ‘loss of function’ mutation, or alternatively, whether the claims are directed to a ‘loss of function’ mutation in addition to the requirement for a 95% sequence identity to the SEQ ID NOS...” (Office Action, page 12; emphasis original).

As described above, Applicants have amended claims 1, 23, 27, and 31 to specify a nucleic acid sequence “containing a loss of function mutation, wherein said nucleic acid containing said loss of function mutation has at least 95% sequence identity to...” SEQ ID NO: 24, 26, 28, or 2, respectively. Applicants submit that the amended claims now clearly specify that the nucleic acid containing the loss of function mutation has at least

95% sequence identity to SEQ ID NO: 24, 26, 28, or 2. The rejection under 35 U.S.C. § 112, second paragraph may also be withdrawn.

CONCLUSION

Applicants submit that the claims are in condition for allowance, and such action is hereby respectfully requested. Applicants request that the Office please contact the undersigned representative by telephone if there are any remaining issues.

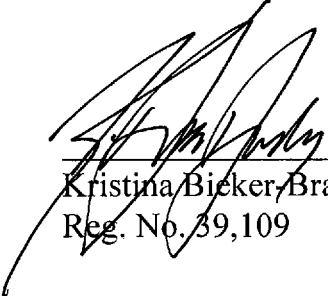
Transmitted herewith is a Petition to extend the period for replying to the Office Action for three months, to and including January 25, 2010, as January 24, 2010 is a Sunday, and payment of the required extension fee.

If there are any additional charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

Date:

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